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ABSTRACT

A study examined the first year of implementation of a college reading program developed at the University of Arkansas at Monticello. The study consisted of two separate analyses. In analysis 1, the characteristics of students who were required to enroll in the remedial reading program were studied to determine trends and develop profiles for the students who successfully exited the reading program in one semester, those who persisted for two semesters, and those who dropped out of school their first semester. Analysis 2 was designed to examine achievement outcomes and persistence effects. Results indicated that the major differences between the three groups of students who were required to take reading were in initial test scores, racial makeup, and age. The group of one semester completers had the highest test scores and was predominantly white, whereas the two semester persisters and reading dropouts were predominantly black. The dropouts were disproportionately older than the other two groups. Although most remedial students had not yet experienced the usual first year college courses, their persistence in college was encouraging. Reading test results indicated that the one semester completers had an overall initial and final pattern of reading achievement which was higher than either the two semester persisters or reading dropouts. (Eighteen references are attached.) (MG)

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A College Remedial Reading Program and the Effects on Retention and Achievement

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A College Remedial Reading Program and the Effects on Retention and Achievement

Remedial programs are one of the fastest growing areas of curriculum on college campuses. Successful programs have the general expected payoff of increased grade point average (GPA) and retention (Bray, 1984). They have been found to specifically decrease the attrition rate of underprepared students (Abrams & Jernigan, 1984; Bray, 1984; Cohen, 1985; Denman, 1983).

Recent studies (Abrams & Jernigan, 1984; Martin & Swindling, 1984; Roueche, 1984) have supported the mandatory assessment and placement of students in these programs. Class size in effective programs should be limited (Landward & Hepworth, 1984), and concern with student interests and attitudes is paramount (Ferguson & Bitner, 1984; Maring & Shea, 1982; Moore & Lemons, 1982; Nist, 1983). The monitoring of student behavior and progress (Cohen, 1985; Roueche, 1984) and flexible completion schedules (Cranney, 1983; Roueche, 1984) are important. In general, flexible instruction and a wide variety of materials characterize effective college reading programs (Cranney, 1983).

Planned program evaluation is also an important aspect of any successful college reading program (Abrams & Jernigan, 1984; Aron, 1978; Cranney, 1983; Hunter, 1984; Martin & Swindling, 1984; Roueche, 1984). It is essential to collect data to establish whether or not these students do remain in college and perform successfully because of their participation in the remedial programs.

The present study looks at the first year of implementation of a college reading program developed at the University of Arkansas at Monticello, a small campus of the University of Arkansas System located in the rural southeast region of Arkansas.

The study consisted of two separate analyses. In analysis one, the characteristics of students who were required to enroll in the remedial reading program were studied to determine trends and develop profiles for the students who successfully exited the reading program in one semester, those who persisted for two semesters to complete the reading requirement and those who dropped out of school their first semester. Analysis two was designed to examine achievement outcomes and persistence effects.

Program Organization

The Nelson-Denny Reading Test (NDRT) was administered during registration to all entering freshmen. A score at the 25th percentile or lower led to mandatory placement in the remedial reading program. Maximum enrollment allowed was 60 students per class hour. Students were given Level 14 of the Reading Yardsticks (RY) diagnostic test. Based on the results, students were then reshuffled within their class hour into one of three subsections.

The lowest subsection or level was designed for students with severe basic reading deficiencies in the areas of word recognition and comprehension. Direct Instruction using the Corrective Reading program (Engelmann, Becker, Carnine, Meyers, Becker, & Johnson, 1980) was used. The middle level was designed for students with moderate reading problems and emphasized vocabulary

development, selected comprehension skills, study skills, volume reading, and spelling. The highest level was designed for students with isolated areas of weakness, and for those weak in the application of reading skills. It emphasized study skills, volume reading, and composition.

The entire program was flexible in that there were many avenues for student movement within and through the program. At the end of the first semester all students were again tested on RY Level 14 as the exit exam. If students met the test-out criteria, they took the NDRT and exited the program. The placement of remaining students was reevaluated and students moved to a more appropriate tier or level of the program if necessary. Instruction in the second semester continued where it left off in the first semester. By the end of two semesters all students who had not dropped out of school tested out of the reading program.

Instruments

The Nelson-Denny Reading Test is a screening device that provides a Vocabulary score, a Comprehension score, and a Total score. Carney and Geis (1981) have verified the usefulness of the NDRT as a device for studying college student attrition, student success, and reading achievement. The Reading Yardsticks is a criterion-referenced test and was used for diagnostic purposes. The Reading section of the Estes Attitude Scales (1981) was used to obtain a measure of student attitude toward reading.

In addition to the information provided by the previously listed commercial instruments, an in-house "Information Sheet" was maintained for

each student. This included self-reported data as well as data from University records such as ACT scores.

Method

Analysis I

In analysis one, the students in the reading program for whom all pertinent data were available were divided into three groups: (1) completers--those who successfully completed the remedial reading program in one semester, (2) persisters--those who took two semesters to successfully complete reading, and (3) dropouts--those who dropped out of school by the end of their first semester. The characteristics of students in these groups were examined.

Results

Completers included 91 students; 96% were between the ages of 17 and 24 and 83.5% were less than 20 years of age. Fifty-two were male and 39 were female with the racial make-up being 71.4% Caucasian and 28.6% Black. Persisters included 33 males and 21 females. Approximately 86% were between the ages of 17 and 24 with 85% being less than 20 years of age. The racial makeup was 35.2% Caucasian and 64.8% Black. The dropouts were predominantly Black (65.4%), 11 were male and 15 were female. Approximately 69% were between the ages of 17 and 24, with 50% being less than 20 years of age.

Demographic data indicated that a higher percentage of white students (71.4%) comprised the completers. The distribution of Black and White students among the persisters and dropouts was equivalent with an

approximate racial make-up of sixty-five percent (65%) Black and thirty-five (35%) White.

As a group, completers had higher ACT scores than the persisters and dropouts. NDRT scores and RY scores revealed a similar trend in that as a group, the completers scored higher than persisters and dropouts on both reading assessment instruments.

The percentage of students also enrolled in remedial English who were completers, persisters, and dropouts were 59.3%, 94.4%, and 76.9% respectively. The percentages of students also enrolled in remedial mathematics who were completers, persisters, and dropouts were 49.5%, 75.9%, and 65.4%.

The percentage of completers required to enroll in other remedial coursework was consistent with their higher level of reading achievement when compared to the percentages of persisters and dropouts required to enroll in other remedial courses. A higher percentage of the persisters and dropouts were required to enroll in the additional remedial courses than completers.

The distribution of students, based on the year which they graduated from high school, was different for the group of dropouts. The dropouts had a disproportionately higher percentage of students who had graduated from high school prior to 1981. This result was consistent with the age distribution for the group of dropouts.

Correlations were calculated for attitudinal and test score data. An earlier study (Heerman & Seltzer, 1983) reported a significant correlation

between the NDRT and student attitude toward reading. The correlations between the reading scale of the Estes Attitude Scales and the total reading score on the NDRT yielded a significant correlation ($p<.05$).

Discriminant analysis was utilized to study group differences for completers and persisters. The analysis showed that the groups were different on the variables studied. The variables which contributed most to the discriminant function and group separation were: RY Comprehension, NDRT Vocabulary, ACT Mathematics, and RY Vocabulary.

Analysis II

In analysis two, all beginning freshmen at the University of Arkansas at Monticello who enrolled that semester, and tested out of the reading program, were utilized as the comparison group to determine achievement outcomes and persistence effects at the end of one year. This group comprised 354 students; approximately 80% were between the ages of 17 and 24 with 67% being less than 20 years of age. One hundred thirty nine students were male, 215 were female, and the racial make-up was predominantly Caucasian (79%) with 21% being Black. The grade-point average for these students was calculated and compared with the GPA for those who successfully completed the reading program and continued their enrollment through the next fall semester. The persistence in college percentage was calculated for the comparison group (those not required to take reading) and compared with the persistence in college percentage for the remedial students.

The group of subjects who were required to take reading included 118 males and 86 females. Approximately 94% were between the ages of 17 and 24

with eighty-two percent being less than 20 years of age. The racial make-up was 52% Black and 48% White.

Results

As a group, students not required to take reading exhibited a GPA of 2.63. The group required to take reading had a GPA of 2.01. Students who did not have to take reading had a persistence in college rate of 49% and a dropout rate of 51%. Those who were required to take remedial reading had a persistence in college rate of 50% and a dropout rate of 50%.

Discussion

The major differences between the three groups of students who were required to take reading were in initial test scores, racial make-up, and age. The group of one-semester completers had the highest test scores and was predominantly White, whereas the two-semester persisters and reading dropouts were predominantly Black. The dropouts were disproportionately older than the other two groups.

Although most remedial students had not yet experienced the usual first year college courses, their persistence in college was encouraging. This is especially true in comparison to a group of students who had a higher initial level of reading proficiency and were better prepared to meet the reading demands of college. One would have expected the dropout rate for underprepared students to be higher than for students who were better prepared.

If we assume that lack of reading ability contributed significantly to the University's high dropout rate for first term freshmen in the past

(approximately 55%), the placement cut off for entering the reading program (25th percentile in NDRT Total Reading) may be too low. On the other hand, the dropout rate (50%) of freshmen who completed the reading program in either one or two semesters was not that much different from the pre-reading program dropout rate of 55%. However, difficulties with the defining of and accounting for dropouts leads to a great lack of measurement precision in this area.

Achievement outcomes were surprising in that it was initially expected that grades received in developmental courses might produce a somewhat inflated grade picture. That was not the case and even with the inclusion of grades earned in developmental courses the GPA for the developmental reading students was well below that which was earned by the students who were not required to take reading.

Even though developmental reading students had a somewhat higher success rate, as measured by persistence in college over a one-year period, they did not exhibit a level of achievement equivalent to students better prepared in reading. Long term (four-year) achievement outcomes and persistence effects will provide a better measure of the effectiveness of the college reading program.

As expected, reading test results indicated the one-semester completers had an overall initial and final pattern of reading achievement which was higher than either the two-semester persisters or reading dropouts. One aspect of the reading achievement scores which needs to be examined further is the difference between the RY Vocabulary and Comprehension scores. The RY entrance and exit scores indicated that vocabulary skills surpassed

comprehension in both instances. The initial group level of comprehension for completers and persisters was quite far apart, however, after two semesters the comprehension levels were quite similar. The importance of comprehension scores was reiterated by the discriminant analysis which emphasized the contribution of RY Comprehension pretest scores as contributing most to group separation between completers and persisters.

Many remedial students needed more than one semester to make reading gains. This supports the need for more complex college remedial programs. At UAM students in all levels of the reading program did increase their reading skills. Whether this progress is sufficient for their continued success in college remains to be seen.

References

Abrams, H. G., & Jernigan, L. P. (1984). Academic support services and the success of high-risk college students. American Educational Research Journal, 21, 261-274.

Aron, H. (1978). A community college reading and study skills program: What is it, what does it do? Journal of Reading, 22, 231-235.

Bray, D. (1984). The evaluation of remedial programs in the community colleges. Sacramento City College. (ERIC Document Reproduction Service No. ED 243 546).

Carney, M., & Geis, L. (1981). Reading ability, academic performance, and college attrition. Journal of College Student Personnel, 22, 55-59.

Cohen, A. M. (1985). Helping ensure the right to succeed: An ERIC review. Community College Review, 12, 4-9.

Cranney, A. G. (1983). Two decades of adult reading programs: Growth, problems, and prospects. Journal of Reading, 26, 416-422.

Denman, M. E. (1983). Reading and the academic content course. Reading Improvement, 20, 267-273.

Engelmann, S., Becker, W. C., Carnine, L., Meyers, L., Becker, J., & Johnson, G. (1980). Corrective Reading Program. Chicago: Science Research Associates.

Estes, T. H., Estes, J. J., Richards, H. C., & Roettger, D. M. (1981). Estes Attitude Scales: Measures of attitudes toward school subjects. Austin: PRO-ED.

Ferguson, A. M., & Bitner, J. (1984). Internal motivation and feelings of college students in the developmental program. Reading Horizons, 24,

99-104.

Heerman, C. E., & Seltzer, K. N. (1983). Correlating reading and academic variables with the Nelson-Denny Test. Reading Improvement, 20, 64-66.

Hunter, J. S. (1984, March). Reading: The key to quality in higher education. Reading World, pp. 255-263.

Landward, S., & Hepworth, D. (1984). Support systems for high risk college students: Findings and issues. College and University, 59, 119-128.

Maring, G. H., & Shea, M. A. (1982). Skills are not enough in college developmental reading. Journal of Reading, 25, 786-790.

Martin, M. D., & Swindling, J. A. (1984). Issues for action in developmental education. Journal of Developmental and Remedial Education, 7, 3-4, 31.

Moore, S. C., & Lemons, R. (1982, October). Measuring reading attitudes: Three dimensions. Reading World, pp. 48-57.

Nist, S. (1983, March). Utilizing student interests in college reading programs: Is it really important? Reading World, pp. 224-230.

Roueche, J. E. (1985). Between a rock and a hard place. Community and Junior College Journal, 54, 21-24.